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09/895,347

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11/03/2006

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EXAMINER

TRAN, HAI V

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,347

Applicant(s)

CRINON ET AL.

Examiner

Hai Tran

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 1-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43,46,49-55,58,61-66 is/are rejected.
- 7) ☒ Claim(s) 44,45,47,48,56,57,59 and 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/14/2006 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 55-66 are rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 55, 58, 61 and 64 define a computer-readable medium embodying functional descriptive material. However, the claim does not define a computer-readable medium and is thus non-statutory for that reason (see USPTO OG Notices: 22 November 2005; Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility; Annex IV –Computer-Related Nonstatutory Subject matter).

The Examiner suggests amending the claim to embody the program on “computer-readable medium” or equivalent in order to make the claim statutory.

For example, the claimed "a computer-readable medium provide instructions that, when executed by a computer" should be changed to the following:

-- a computer-readable medium **encoded with computer instructions capable of being executed by a computer** --

Allowable Subject Matter

Claims 44-45, 47-48, 59-60 and 56-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 52, 54, 64, 66 are rejected under 35 U.S.C. 102(e) as being unpatentable by Barton et al. (US 6490722).

Claim 52, Barton discloses a method comprising:

receiving a plurality of modules at a processing system, at least one module of the plurality of modules having at least two instances (Col. 11, lines 25-57);

creating a carousel including the plurality of modules, wherein to create the carousel, the processing system generates a plurality of module schedules for the plurality of modules (Col. 11, lines 25-30; and lines 37-57),

determines a metric for each module schedule of the plurality of modules schedules (Col. 15, lines 37-48), and

selects one of the module schedules having an optimum metric (Col. 18, lines 25-47; Col. 24, lines 48-Col. 25, lines 22); and

storing the one selected module schedule in a memory coupled with the processing system (the one selected module is inherently stored during the period of transmission, i.e., carousel transmission);

Claim 54, Barton further discloses transferring the one selected module schedule from the memory to an insertion device for encapsulation into a transmission (Col. 11, lines 41-50).

Claim 64, an article of manufacture is analyzed with respect to method claim 52.

Claim 66, the article of manufacture is further analyzed with respect to method claim 54.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 43, 46, 49, 50-51, 53, 55, 58, 61-63, and 65 are rejected under 35

U.S.C. 103(a) as being unpatentable over Barton et al. (US 6490722) in view of Kreyszig ("Advanced Engineering Mathematic, 8th edition, 1999).

Claim 43, Barton discloses a method comprising:

providing a carousel schedule to a processing system, the carousel schedule including a plurality of modules, at least one of the modules having at least two instances (Col. 11, lines 25-57);

Barton further discloses creating a metric for the carousel schedule (Col. 24, lines 37-Col. 25, lines 22).

Barton does not clearly disclose "wherein to create the metric, the processing system determines an interval difference for each instance of each module of the plurality of modules, applies a function to the interval difference to determine a result for each instance of each module, and adds the result for each instance of each module to a sum, the sum corresponding to the metric; and outputting the metric, the metric for use in evaluating the carousel schedule."

Kreyszig discloses the processing system determines an interval difference for each instance of each module of the plurality of modules, applies a function to the interval difference to determine a result for each instance of each module, and adds the result for each instance of each module to a sum, the sum corresponding to the metric; and outputting the metric for use in evaluating whether a distribution of certain kind is normal (page 1137-1140). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Barton to include a goodness metric, as taught by Kreyszig, in order to provide a measure of how well a statistical model fits a set of observation for distributing program guide schedule in the most optimum manner.

Claim 46 is analyzed with respect to claim 43.

Claim 49, Barton discloses a method comprising:

receiving a plurality of modules at a processing system, at least one module of the plurality of modules having at least two instances (Col. 11, lines 25-57);

creating a carousel including the plurality of modules, wherein to create the carousel, the processing system generates a first module schedule for the plurality of modules and generates at least a second module schedule for the plurality of modules and selects one of the first module schedule and the second module schedule in response to the 1st and 2nd statistical analysis (Col. 24, lines 12-37) and selecting transmitting a carousel exhibiting the selected module schedule to an

insertion device for encapsulation into a transmission (Col. 24, lines 37-Col. 25, lines 22).

Barton does not disclose "determines a first goodness metric for the first module schedule, and determines a second goodness metric for the second module schedule".

Kreyszig discloses the processing system determines a first goodness metric for the first module schedule, and determines a second goodness metric for the second module schedule (page 1137-1140). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Barton to include a goodness metric, as taught by Kreyszig, in order to provide a measure of how well a statistical model fits a set of observation for distributing program guide schedule in the most optimum manner.

Claim 50, Kreyszig further discloses wherein the selected module schedule has an optimum goodness metric (deviation does not exceed c ; page 1137).

Claim 51, wherein the optimum goodness metric corresponds to a lowest goodness metric (deviation does not exceed c ; page 1137);

Claim 53, Barton does not disclose wherein the optimum goodness metric corresponds to a lowest goodness metric.

Kreyszig discloses the use of a goodness metric for determining the optimum goodness metric corresponds to a lowest goodness metric (deviation does not exceed c; page 1137). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Barton to include a goodness metric, as taught by Kreyszig, in order to provide a measure of how well a statistical model fits a set of observation for distributing program guide schedule in the most optimum manner.

Claim 55, an article of manufacture is analyzed with respect to method claim 43.

Claim 58, an article of manufacture is analyzed with respect to method claim 46.

Claim 61, an article of manufacture is analyzed with respect to method claim 49.

Claim 62, the article of manufacture is analyzed with respect to method claim 50.

Claim 63, the article of manufacture is analyzed with respect to method claim 51.

Claim 65, the article of manufacture is analyzed with respect to method claim 53.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on (571) 272-7331. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HT:ht
10/26/2006

A handwritten signature in black ink, appearing to read 'HAITRAN', is written over two horizontal lines.

**HAITRAN
PRIMARY EXAMINER**